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| 10/762,994   | 01/22/2004  | Masaaki Ogura          | RCOH-1068           | 5991             |
| 21302 7590 04/13/2009<br>KNOBLE, YOSHIDA & DUNLEAVY<br>EIGHT PENN CENTER<br>SUITE 1350, 1628 JOHN F KENNEDY BLVD<br>PHILADELPHIA, PA 19103 |             |                        |                     |                  |
| EXAMINER<br>ZHANG, SHIRLEY X   |             |                        |                     |                  |
| ART UNIT<br>2444   |             | PAPER NUMBER           |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/762,994

**Applicant(s)**

OGURA, MASAOKI

**Examiner**

SHIRLEY X. ZHANG

**Art Unit**

2444

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-4, 9-11, 13-15, 20-22, 24-26, 31-37 and 42-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4, 9-11, 13-15, 20-22, 24-26, 31-37 and 42-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-848)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

#### **DETAILED ACTION**

Claims 2-4, 9-11, 13-15, 20-22, 24-26, 31-37 and 42-47 were previously pending;

Claims 34 and 45-47 have been amended;

Claims 2-4, 9-11, 13-15, 20-22, 24-26, 31-37 and 42-47 are now pending;

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 30, 2009 has been entered.

#### ***Response to Amendments***

2. Applicant's arguments and amendments filed on January 30, 2009 have been carefully considered. Applicant's amendments removed some limitations from the previous version of the independent claims and as a result broadened the scope of the claims, therefore, the prior art references previously relied on still apply to the current version of the claims.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-4, 9-15, 20-26, 31-37, and 42-44** are rejected under 35 U.S.C. 103(a) as obvious over Martin et al. (U.S. 7,016,955, hereinafter “**Martin**”), in view of **Kanakubo** (U.S. 5,897,252).

**Regarding claim 45**, Martin disclosed a method of remotely managing a plurality of predetermined managed apparatuses over a computer network, each of the managed apparatuses reporting to the management apparatus abnormal condition information, abnormal condition removal information if the detected abnormal condition has been removed in the managed apparatus and a power<sup>4</sup> activation report that power has been activated in the managed apparatus, the method comprising the steps of:

receiving at the management apparatus the abnormal condition information including the corresponding abnormal condition type for causing to fail a predetermined non-communication function in the managed apparatuses (Martin, column 5, line 6-8 and column 5 line 39-58 discloses that the managed devices detect and send to the management station SNMP Traps to indicate abnormal conditions on the devices);

receiving at the management apparatus the abnormal condition removal information (Martin, column 8, line 30-43 discloses that a “Link Up Trap” indicates that the previous abnormal condition of “Link Down” has been removed);

receiving at the management apparatus the power activation report (Martin, column 5, line 38-43);

storing and or managing the abnormal condition information, the abnormal condition removal information and the power<sup>4</sup> activation report (Martin, column 4, lines 3-11);

preventing the received abnormal condition information from being notified to an operator (Martin, column 11, lines 7-9 disclosed an event is additional entered to show this to the user, where the unresolved abnormal events can be identified as those that do not have the corresponding concluding events displayed) of the management apparatus if: 1) the corresponding abnormal condition removal information or 'the power' activation report has not been received within a first predetermined amount of time  $t_1$  since the reception of the abnormal condition information at the management apparatus, but 2) the power activation report has been received within the first predetermined amount of time  $t_1$  since the reception of the abnormal condition information at the management apparatus, wherein the received abnormal condition information will be notified to the operator of the management apparatus if: A) the corresponding abnormal condition removal information has not been received within a second predetermined amount of time  $t_2$  since the reception of the power activation report (**Martin** discloses a method and system for filtering and selectively displaying events by using timers, and comparing later received events with prior events to decide whether the previously reported abnormal condition has been resolved so that the user or network operator can pay attention to unresolved abnormal conditions, where a timer can be reset by a second event. More specifically, Martin's disclosure in Fig. 3 and column 9 and 10 lays out a structure that allows a first event E to activate a timer (step 104), and a second event E' to stop the first timer and restart a second timer (step 112 and 114). When applied to a specific type of devices such as the printers disclosed by **Kanakubo** in Fig. 6-9 and column 7, lines 25-40, Martin's system would have operated in the way as described in the claim. In Kanakubo, when an error is detected in

the printer, the power controller determines whether or not the error removal operation occurs within the predetermined period of time. If determined not, the power controller shuts off the power to the controller. Then when the power is turned on in an error state, the err-removal operation is made, and the normal operation is restored, see Kanakubo, column 7, lines 25-40; Martin, Fig. 3, column 9, lines 49-67 and column 10, lines 1-50 discloses that at step 104, the management station sets timers for abnormal events of types 1, 2 or 3 and then waits for the abnormal condition removal events of types 1a, 2a or 3a to arrive at step 107; at step 106, the abnormal events are displayed to the user; at step 103 and 115, abnormal condition removal events that correspond to the previously reported abnormal events are displayed to indicate to the user that the respective abnormal events have resolved within the set time period, see column 11, lines 7-9; therefore the display of an abnormal event without the corresponding abnormal condition removal event serves as a notification to the user or a center operator that the abnormal condition has persisted for a predetermined amount of time).

One skilled in the art would have been motivated to combine Martin with Kanakubo because both disclosed handling and resolving error conditions in a device (Martin, column 3, "Summary of Invention" and Kanakubo, column 2, lines 27-67).

Therefore, it would have been obvious for one to apply Martin's system for remote device management to Kanakubo's printing device such that Kanakubo's device can be managed remotely and more efficiently.

**Claim 34** lists substantially the same elements of **claim 45**, but in system rather than method form. Therefore, the supporting rationale of the rejection to **claim 45** applies equally as well to **claim 34**.

**Claim 46** lists substantially the same elements of **claim 45**, but in memory medium rather than method form. Therefore, the supporting rationale of the rejection to **claim 45** applies equally as well to **claim 46**.

**Claim 47** lists substantially the same elements of **claim 45**, but in apparatus rather than method form. Therefore, the supporting rationale of the rejection to **claim 45** applies equally as well to **claim 47**.

**Regarding claims 2, 13, 24 and 35**, the combination of Martin and Kanakubo disclosed claims 45, 46, 47 and 34.

Martin further discloses that the abnormal condition information is distinct for each of the managed devices, and the abnormal condition information is stored and managed for each of the managed devices at the management device (column 4, line 52-58 discloses using SNMP. It is inherent in SNMP that MIB data transported by SNMP is distinct for each device because it contains a unique identifier for every managed device. See IETF RFC-1157, "A Simple Network Management Protocol (SNMP)"), and the abnormal condition information is stored and managed for each of the managed devices at the management device (column 5, line 9-16, the

network management application processes the received data, generates and logs events in memory).

**Regarding claims 3, 14, 25 and 36,** the combination of Martin and Kanakubo disclosed claims 2, 13, 24 and 35.

Martin further discloses that the abnormal condition removal call is distinct for each of the abnormal condition types (Martin specifically teaches in column 5, lines 44-47 that managed network device sends to the network management station SNMP linkUp and linkDown traps to indicate that a port on the device has gone up or down. SNMP linkDown and linkUp are traps predefined in the SNMP specification RFC 1157, where linkDown is a type of abnormal condition while linkUp is the corresponding abnormal condition removal information. The examiner would like to further point out that SNMP linkUp and linkDown are merely examples of SNMP traps. Many other device specific traps may be defined using MIB, as is also disclosed in Martin, column 5, line 50. For more information on SNMP traps and MIBs for printing devices, the applicant is recommended to review the document IETF RFC 1759, "Printer MIB", in which many abnormal condition types are defined with a unique object ID for identification purpose, and the leading edge events and trailing edge events disclosed in section 2.2.13.4 correspond to the abnormal conditions and abnormal condition removals recited in the current application, respectively).

**Regarding claims 4, 15, 26 and 37,** the combination of Martin and Kanakubo disclosed claims 45, 46, 47 and 34.



Martin further discloses that the abnormal condition removal call indicates the removal of all of the abnormal conditions at a single one of the managed devices (column 8, line 8-12, where “IP Ping Start” indicates removal of all side effect events such as “Warm/Cold Start Trap”, “IP Ping Stop” and “Link Down”).

**Regarding claims 9, 20 and 42**, the combination of Martin and Kanakubo disclosed claims 45, 46 and 34.

Martin further discloses that the method comprises additional steps of:  
storing user information for each of the managed devices at the management device (Martin, column 4, line 58-63, it is inherent in SNMP that the management device stores the user information such as destination address); and  
determining the first predetermined amount of time  $t_1$  based upon the stored user information (Stevenson, [0064], where the predefined time interval is dependent upon the monitored characteristic and the device).

**Claim 31** lists elements that can all be found in **claim 9**, but in system rather than method form. Therefore, the corresponding supporting rationale of the rejection to **claim 9** applies equally as well to **claim 31**.

**Regarding claims 10, 21 and 43**, the combination of Martin and Kanakubo disclosed claims 45, 46 and 34.

Martin further discloses that the method comprises additional steps of:

storing device information for each of the managed devices at the management device (Martin, column 4, line 58-63 discloses using SNMP; It is inherent in SNMP that the management device stores the user information such as destination address); and

determining the second predetermined amount of time  $t_2$  based upon the stored device information (Stevenson, [0064], where the predefined time interval is dependent upon the monitored characteristic and the device).

**Claim 32** lists elements that can all be found in **claim 10**, but in system rather than method form. Therefore, the corresponding supporting rationale of the rejection to **claim 10** applies equally as well to **claim 32**.

**Regarding claims 11, 22, 33 and 44**, the combination of Martin and Kanakubo disclosed claims 45, 46, 47 and 34.

Martin further discloses that the abnormal condition information, the abnormal condition removal call and the power activation report are written in a predetermined structured language (column 4, line 58-63 discloses using SNMP; it is inherent in SNMP that MIB data is written in ASN.1 format, which is a predetermined structured language) and sent through firewalls (for network security reasons, firewalls are very common in a management network; Examiner considers "firewall" as a non-essential feature for the present invention).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHIRLEY X. ZHANG whose telephone number is (571)270-5012. The examiner can normally be reached on Monday through Friday 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shirley X. Zhang/  
Examiner, Art Unit 2444  
4/9/2009

/Joseph E. Avellino/  
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